DOCUMENT RESUME

ED 245 229 CS 208 299

AUTHOR Fortune, Ron; Neuleib, Janice
TITLE Integrating Secondary and Post-Secondary Writing Instruction through Collaborative Teaching.
PUB DATE Mar 84
NOTE 30p.; Paper presented at the Annual Meeting of the Conference on College Composition and Communication (35th, New York, NY, March 29-31, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *College School Cooperation; *Curriculum Development; Curriculum Enrichment; Higher Education; Secondary Education; Sequential Approach; Teacher Improvement; *Writing Exercises; *Writing Instruction; *Writing Research
IDENTIFIERS *Writing Programs

ABSTRACT

With support from the National Endowment for the Humanities, writing teachers at three central Illinois high schools, a community college, and Illinois State University (ISU) are addressing the problem of getting composition teachers to cooperate in developing long range curricula and sharing actual classroom practices through a collaborative teaching project. The program began in July 1983 and will continue through May 1985. It is subdivided into five stages that are carefully structured to build a sequential writing program starting in the sophomore year of high school and moving through the freshman year of college. Participating teachers first met in daily workshops for a month studying recent research on the writing process and on the relationship between cognitive growth and the development of writing abilities. During the fall semester, the high school and community college teachers cooperatively taught the freshman writing course at ISU with the two university teachers. The ISU instructors then collaboratively taught the high school and community college students with their counterparts. After the teaching was completed, the participants met again to develop a curricular plan for each of the project's courses and to integrate that course into a long-term sequence. (CRH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED245229

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Ron Fortune
Janice Neuleib
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Ron Fortune and Janice Neuleib
Department of English
Illinois State University
Normal, Illinois 61761

Integrating Secondary and Post-Secondary Writing Instruction Through Collaborative Teaching

One of the most important developments currently taking place in composition teaching focuses on efforts to get high school, community college, and university writing teachers to work together more closely. Behind calls for more cooperation among these teachers is the recognition that writing skills must develop over a series of years and cannot be expected to reach an accepted level of maturity within a single semester or a single year. If asked, most secondary and post-secondary writing teachers would probably argue that they do not need to be told that they alone cannot take students as far as they need to go in the development of their writing abilities. However, when it comes to actual classroom practices, teachers at all levels typcially teach writing in a vacuum, ignoring or at least not taking into account sufficiently what students do in the writing classes that precede and follow the individual courses these teachers teach.

With support from the National Endowment for the Humanities, writing teachers at three central Illinois high schools, a community college, and Illinois State University are addressing this problem through a collaborative teaching project. The program began in July, 1983, and will continue through May, 1985. It is subdivided into five stages that are carefully structured to build a sequential writing program starting in the sophomore year of high school and moving through the freshman year of college.

CS 208 299

Last summer, the teachers participating the project met in daily workshops for a month studying recent research on the writing process and on the relationship between cognitive growth and the development of writing abilities. (See the handout for a bibliography of the works studied.) During the fall semester of this school year, the participating teachers from the high schools and the community college cooperatively taught the freshman writing course at Illinois State with the two university writing teachers involved in the project. This semester, the university teachers are teaching the high school and community college courses with their high school and community college collaborators. Over this coming summer, after the collaborative teaching has been completed, the participating teachers will again gather to construct as a group a curricular plan for each of the project's courses, a plan that will address the immediate needs of the students who enroll in the course but that will also integrate that course into a long-term sequence. Finally, during the 1984-1985 school year, the materials developed during the summer will be tested and analyzed, and then the results of the project will be disseminated.

The project has two distinctive features that promise to make it especially effective in dealing with the gaps that typically undermine the sequential development of writing skills in high school and college. First, it has project participants teach in each others' classes so that they can more effectively harmonize the divergent perspectives on composition instruction that naturally

result from teaching writing at different grade levels. Second, it bases the sequence of secondary and post-secondary writing courses on students' changing cognitive abilities as they move from their early through their late adolescent years.

Pernaps the greatest advantage to having the teachers involved in the project teach in each others' classrooms is that it creates an experience-based frame of reference that enables teachers to see first hand the teaching and learning problems that teachers at adjacent grade levels must solve. The coordination of writing instruction across grade levels requires that teachers at different grades have a more holistic understanding of the development of students' thinking and writing abilities than can be acquired from teaching at a single grade level. In the past, teachers have cultivated this understanding by talking with each other at professional conferences, in-service workshops, and seminars. But, while these efforts are worthwhile for the collegiality they promote, they tend to provide participants with only a superficial view of the classroom realities that colleagues across the grades must handle. As a result, each teacher returns to the classroom no better equipped than before to implement a writing curriculum that plays its part in gradual evolution of students' writing skills over a period of years. A comprehensive grasp of what should happen in writing courses over the high school and early college years can only come from a direct and immediate exposure to all of the writing courses that students take during this period.

In addition to improving the coordination between writing

courses at adjacent grade levels, the collaborative teaching at the heart of this project also enriches the writing instruction in each of the project's courses by basing that instruction on the input of several writing teachers with diverse teaching backgrounds rather than on the more limited perceptions of a single teacher. This interaction is especially valuable at a time when our understanding of what constitutes effective writing instruction is changing so drastically. Our journals are filled with discussions of "paradigm shifts" and analyses of the differences between teaching writing as a product and teaching it as a process. And, a number of recent studies document the reluctance with which these changes are being met (Applebee, 1981; Hairston, 1982; Tibbetts, 1982). However, when teachers work together to overhaul their approaches to teaching writing, they can pool their efforts to understand the implications of current composition research for their classroom practices. This makes the research less intimidating and its translation into the classroom less frustrating.

The research that the teachers are drawing on in formulating classroom strategies focuses especially on those aspects of the writing process that have suffered most from traditional composition pedagogy. Thus, some of the issues that these teachers are addressing include how to help students develop writing processes that involve the creation of successive drafts, how to help students discover problem-based topics that genuinely compel them to write, how to help students understand the functions of a persona and of an audience in a rhetorical act, how to create a form for a text that

grows out of its content, and how to handle reading tasks so that they help to refine students' writing intuitions. All of the teachers in the project examined together composition research bearing on these issues. However, since most of them have always used the final draft of an essay as the starting point for their instruction, a review of research only exposed them to another abstract concept of what it is to teach writing. Working together to forge concrete strategies for basing writing instruction on that concept is not only increasing the chances that they will translate that concept into a viable pedagogy but it is also, in the process, clarifying why that concept is ultimately more desirable than the one on which they have always based their instruction.

In a study of high school seniors and college juniors in Canada, Aviva Freedman and Ian Pringle discovered that the writing of the two groups differed in only two respects. First, the college juniors were inclined to deal with more abstract ideas than those generally addressed by the high school seniors. Second, the college juniors used a more sophisticated diction than the high school seniors, reflecting their concern with more abstract ideas. However, in other aspects of writing, such as structure and grammar, the college juniors performed no better than the high school seniors. Freedman and Pringle interpreted this as an indication, not that the college juniors had developed their writing skills only as far as the high school seniors had, but that the college students were attempting more complex cognitive tasks and the development of their writing skills had not kept pace with their cognitive

development. Thus, although their writing skills may have been better than those of the high school seniors tested, these skills were still not sufficiently developed to meet the demands of their ideas, and their writing abilities may have seemed no better than a high school senior's (Freedman and Pringle, 1981).

This project's concern with the relationship between the development of students' writing abilities and their cognitive growth focuses on two concerns. First, an effective sequence of writing courses should progressively nuture the students' ability to deal with abstract thought as they mature over a series of years. Second, as their ability to deal with increasingly abstract thought evolves, writing courses should teach them to re-work their language skills to accommodate their need to express their ever more complex ideas.

Efforts to cultivate students' capacity for dealing with abstract thought concentrate on developing problem-solving assignments that require students to exercise their analytical skills to the greatest degree possible. In order to accommodate and enhance the students' growing ability to think abstractly, the assignments move from an emphasis on concrete problems with which students can immediately identify in the earlier grades to theoretical and hypothetical problems that require considerable decentering in the later grades. Moreover, in the earlier grades, students generally identify their own problems to address in their writing while students in the later grades both select their own problems and are assigned them. This overall pattern largely

reflects the research of Piaget, Perry, and others who see cognitive development in early to late adolescence as involving a progression from concrete and two-dimensional thought to hypothetical and multi-dimensional thought (Piaget, 1968; Perry, 1970).

This same research forms the basis for the teachers' efforts to help students re-work their language skills to match their growing capacity for abstract thought. Thus, the development of students' ability to manipulate syntax and to organize a text follows a path that parallels that followed by their evolving ability to think abstractly. This means that, in the early grades, their tendency to think more in terms of a self-defined world than of a world defined by others as well as the self puts them in a position to appreciate most the expressive possibilities of syntax and structure. Moreover, since they are just learning to conceptualize, they are most prepared to learn the basic principles underlying the concepts of a sentence and a paragraph. Then, as they move from grade to grade and develop a greater ability to decenter and to deal with multi-dimensional thought, they are more ready to manipulate syntax and structure for the effect on others as well as the self and to understand and use more elaborate syntactic and structural strategies best suited to their more complex content.

Audience and problem solving

Developmental theory and research have led the teachers in the current project to emphasize revision of papers, especially revision based on a reader response model. The revision process becomes more refined as it moves through the course and up the grade levels. Given this emphasis on revision, the most important readjustment that both teachers and students have had to make has been from single draft to multiple draft papers.

As students become more aware of the reader as audience, they learn to tailor their papers through succeeding drafts for that audience. They also learn to find and write from problems that will be appropriate for possible audiences appropriate to their abilities and information stores. They also learn to let the paper find a form that is appropriate to the problem, the audience, and the situation in which they are writing.

Assignments

The assignments for the courses follow this pattern. First, students choose as many potential roles as they can, based on a role heuristic. They then choose possible audiences for theses roles. They then discover which papers they might write for each of those audiences. (Role heuristics handed out at this point) This has been one of the first papers for the courses. The next assignment is to choose as many problems as possible. Students are given problem questions, both possitive and negative problems, and asked to answer the questions in order to discover which problems will interest them.

Once students have the concepts of role/audience and of problem solving developed through the first three or four papers, they learn to proceed to other kinds of writing. (Hand out problem solving heuristics) One type of paper that has been quite successful has been the synthesis and analysis paper. This paper asks the students to do survey research in which they ask questions of people whom they know on a variety of topics. These questions range from "What is your favorite movie?" to "How many hours a day do you study and watch television?" Students then take the results of their surveys and write papers discussing the implications of their surveys; e.g., students who watch television more than two hours per day tend to study less than they should. These questions on studying and television can be embellished by adding questions about grades and attitudes toward future success. The point of this

assignment is that the students discover new and fascinating questions to ask.

Finally, the students move to documented writing. The papers in the project do not include a research or library paper per se. What the assignment involves is teaching students to learn that any time they want to write a successful informative or persuasive paper, they need to decide whether they need more information than they have stored in their own minds. This paper teaches them when they need to look for support for their ideas and how to look for that support. They do not merely go do research and then write a paper. Rather, they decide what they want to write about, a problem in which they are interested, and who would be an appropriate audience for that problem. Then they go to find information and support for the paper they have begun to write.

Process of writing papers

Each paper goes through successive drafts in somewhat similar ways, though the teachers in the project seek to avoid developing new algorithms that will inhibit writing in the same way that the traditional five paragraph essay seems to have done for some students. For the papers that are emphasizing role and audience students begin with listing

their roles. For those papers that will begin with a problem, students answer the problem questions. In either case, they must then move to the other starting point, listing roles if they have found problems or finding a problem once they have a role in mind.

The next step is some form of invention. Most often students have begun with free writing or prewriting. They have some general idea of what the paper will be, but rather than begin to produce a formulated draft, they write whatever comes to their minds on the topic. This stage has been very difficult for students. They want ever so much to produce what seems to them to be a finished paper. The teachers have to assure them again and again that errors or even perfect logic do not count at this point. The important aim is to get ideas down on paper. The form will come later.

At this point students stop and discuss their prewriting with teachers and fellow students. They try to decide what they really want to write about. Often the prewriting has brought to consciousness other problems or audiences than those they originally thought they had in mind. At this point the real purpose of the paper begins to emerge. The student then plans the first draft.

The writing of the first draft occurs in class with the teachers available to give suggestions and to emphasize that a draft is not a finished paper. Later as the students become more adept at understanding the concept of revision,

they write drafts outside of class and spend class time peer revising and editing.

When the first draft is completed, the student read each other's papers using peer revision sheets. (Distribute sample peer revision sheets and sample papers.) These sheets are developed by the teachers for each assignment. At the first draft stage the revision questions have to do with macrostructures rather with microstructures. The teachers in the project learned to keep Nancy Sommers' article on grading in mind. Do no tell anyone about comma splices and sentence structure when the whole paragraph may be rewritten or dropped out of the finished copy of the paper.

From the revision sheets the students develop a plan for the second draft. That draft, too, is written in class for the first two or three papers. Teachers carefully supervise the writing process at this stage since it is so difficult for students to accustom themselves to the idea of making macrostructural revisions. When the second draft is completed, the students receive peer editing sheets on which they are to make suggestions for editing changes for the final draft. At this stage the changes are at the sentence and word level. (Hand out peer editing sheets.)

When final drafts are finished, students exchange papers one last time to proofread for typos and other minor infelicities that may still be left in this last copy. The papers are then turned in with all drafts, plans, and

revision and editing sheets. The grades are based on the process as well as on the final copy. Students receive points for changes they make from draft to draft and for their responses to the revision and editing sheets, both their responses to each other's papers and their changes based on peer responses.

Expressive Writing Activities

In addition to the papers written for the classes, students also work on journal writing, sentence combining, and essay summaries. These activities are designed to become more and more demanding and extensive in their scope as they progress through the grades. For example, journal entries become longer, and the topics become more elaborate for older students. The sentence combining activities begin as language based activities and progress to become rhetorical activities for older students.

The summary activity is one of the major contributions of this project since students learn to integrate reading and writing. By learning to write progressively more consise and clear summaries of essays, students develop the ability to read for the exact purpose of an author. These summaries not only keep students reading, while giving the teacher time not spent on discussing essays in class; they

also encourage the students to see the mental construct that the author had as he or she produced the essay. The teachers in the project have found that this method is a far better use of a reader than class discussions based either on structure or ideas in the essays. Class time remains centered around the writing process and is not spent on materials that must be extrapolated into direct writing instruction.

One other valuable activity that has been used in this project is the development of exercises form students' own writings. Rather than use exercises on developing a first draft from a prewriting or on filling logical gaps in a paragraph from a text, the teachers have constantly developed materials from their students own writing. (Hand out exercises.)

For example, when a student has written an introduction that leaves out major points necessary to the reader's understanding, the teacher develops an exercise showing blank lines where the information should be added. The class then discusses how the introduction should have been developed. This process also works extremely well for logical in body paragraphs as well.

Conclusion

Thus the Illinois State project has developed both new methods and materials for using current composition research. Teachers have found ways of making the process of writing a vital part of their own teaching. They have also found ways of teaching language and logic through the students' own writing rather than through dissociated exercises. The methods developed in this project allow the teacher to intervene in the process and produce student writers who have benefited from the work being done in the field of composition research.

Fortune/Neuleib
Illinois State University

READING LIST FOR NEH WORKSHOPS
SUMMER, 1983

Bereiter, Carl. "Development in Writing" in Cognitive Processes in Writing. Edited by Lee Gregg and Irwin Steinberg. Hillsdale, N.J: Lawrence Erlbaum Associates, 1980, pp. 73-93.

Berlin, James. "Contemporary Composition: The Major Pedagogical Theories." College English, 44(December 1982), 765-777.

Bracewell, Robert. "Writing as a Cognitive Activity." Visible Language, 14, No. 4, 1980, 400-422.

Bruner, Jerome. "The Act of Discovery" in Beyond the Information Given: Studies in the Psychology of Knowing. Selected, edited, and introduced by Jeremy M. Anglin. New York: W. W. Norton, 1973, pp. 401-412.

Christensen, Francis. "A Generative Rhetoric of the Paragraph" in Notes Toward a New Rhetoric. New York: Harper and Row, 1967, pp. 52-81.

Cooper, Charles. "An Outline for Writing Sentence-Combining Problems." English Journal, 62(January 1973), 96-102, 108.

Faigley, Lester, and Stephen Witte. "Analyzing Revision." College Composition and Communication, 32(December 1981), 400-414.

Flower, Linda, and John Hayes. "A Cognitive Process Theory of Writing." College Composition and Communication, 32(December 1981), 365-387.

Freedman, Aviva, and Ian Pringle. "Writing in the College Years: Some Indices of Growth." College Composition and Communication, 31(October 1980), 311-324.

Gebhardt, Richard. "Initials Plans and Spontaneous Composition: Toward a Comprehensive Theory of the Writing Process." College English, 44(October 1982), 620-627.

Graves, Donald. "Balance the Basics: Let Them Write." Paper completed for the Ford Foundation, February, 1978.

Hake, Rosemary, and Joseph Williams. "Style and Its Consequences: Do as I Do, Not as I Say." College English, 43(September 1983), 433-451.

Haynes, Elizabeth. "Using Research in Preparing to Teach Writing." English Journal, 69(January 1978), 82-87.

Kurfiss, Joanne. "Intellectual, Psychological, and Moral Development in College: Four Major Theories." Washington, D.C.: Council for Independent Colleges, 1983.

Meyer, Bonnie J.F. "Reading Research and the Composition Teacher: The Importance of Plans." College Composition and Communication, 33(February 1982), 37-49.

Murray, Donald. "Writing as Process: How Writing Finds Its Own Meaning" in Eight Approaches to Teaching Composition. Edited by Timothy Donovan and Ben McClelland. Urbana, Ill.: NCTE, 1980, pp. 3-20.

Pianko, Sharon. "A Description of the Composing Processes of College Freshman Writers." Research in the Teaching of English, 13(December 1979), 5-22.

Rose, Mike. "Rigid Rules, Inflexible Plans, and the Stifling of Language: A Cognitivist Analysis of Writer's Block." College Composition and Communication, 31(December 1980), 389-399.

Sommers, Nancy. "Revision Strategies of Student Writers and Experienced Adult Writers." College Composition and Communication, 31(December 1980), 378-388.

_____. "Responding to Student Writing." College Composition and Communication, 33(May 1982), 148-156.

Weaver, Constance. "Grammar and Writing" from Grammar for Teachers: Perspectives and Definitions. Urbana, Ill: NCTE, 1979, 56-87.

Young, Richard. "Problems and the Composing Process" in Writing: Process, Development, and Communication. Edited by Carl Frederiksen and Joseph Dominic. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1981, pp. 59-66.

Role Heuristic
Writing to Communicate

1. Choose a role from the various roles you play in your life. Some examples could be tennis player, dental assistant, TV viewer, chef, pet owner.

2. Define possible audiences for that role.

Example

Dental assistant

dentists

other assistants

children

prospective assistants

parents

3. Imagine one or more papers that you would write from each of ther role/audience links. For example, the dental assistant could write a paper to dentists comparing the assistant's work to the dentist's work and asking for higher pay. Or she could write to prospective assistants explaining how to get a job as a dental assistant.

4. Now begin to develop the topic using lists of ideas and free writing.

Taken from Questions and Answers: A Writing Center Approach to Composition.

Fortune/Neuleib
Illinois State UNiversity

NEH COLLABORATIVE TEACHING PROJECT
EDITING SHEET FOR SECOND DRAFT OF ESSAY FIVE
FALL, 1983

Author's Name _____

Editor's Name _____

Assignment _____

Date _____

1. Does the writer establish a clear position with regard to the problem at the beginning of the essay? If so, what is it? If not, can you suggest a likely position?

2. Is the plan of the essay now clear? Should any point be left out? Should a point be added?

3. Is paragraph #4 well-developed? How does the writer satisfy the expectations that he or she creates in the reader at the beginning of the paragraph?

4. Bracket at least three sentences that you wish the writer had written differently. Tell the writer how to re-write the sentences.

5. Based on what you see in this second draft, what problems with grammar and mechanics should the writer be especially careful to avoid in the final draft?

Fortune/Neuleib
Illinois State University

NEH COLLABORATIVE TEACHING PROJECT
AUDIENCE RESPONSE SHEET FOR ESSAY FIVE
FALL, 1983

Author's Name _____

Editor's name _____

Assignment _____

Date _____

1. Is the problem stated clearly at the beginning of the draft? State the problem.

2. Does the writer show adequate knowledge of the academic subject area? Briefly describe how this knowledge is conveyed.

3. Has the writer organized his or her information around meaningful issues? In other words, does each part of the paper focus on a subject that has a direct bearing on the problem and that is not covered elsewhere in the essay?

4. Has the writer made the problem meaningful for a specific audience? Name the audience.

5. Outline the draft.

Fortune/Neuleib
Illinois State University

NEH COLLABORATIVE TEACHING PROJECT
QUESTIONS FOR FINDING PROBLEMS TO
INVESTIGATE THROUGH WRITING
FALL, 1983

I. Negative Problems (Conflict):

1. How would I like to change the behavior of the people around me?
2. Do I think about some topics day in and day out because they frustrate, anger, or worry me?
3. Do I need to change my attitudes towards certain people and their beliefs and values?
4. If I could avoid certain experiences or situations, what would they be and why would I want to avoid them?
5. When I am least satisfied with my own behavior, what character traits of mine cause me to do things that I later regret having done?
6. Do I sometimes sense that I am two people, one that I present to the world and the other that I keep to myself? If so, am I satisfied with this arrangement?
7. If I could change certain circumstances in the world around me, what would they be?
8. Do I see injustices in the world around me that I would like to correct?
9. Am I satisfied with the direction that I see my life taking?

II. Positive Problems. (The Opportunity to Increase Knowledge).

1. Are there people, places, or things about which people should know more than they do?
2. Do I have a perspective on a subject that I think would enlighten other people?
3. Can I think of a subject about which I have read in the past year that I would like to investigate?
4. Why have I selected the major (hobby, pastime, etc.) that I have?
5. Am I uncertain about how I should think with regard to a certain subject about how I should behave in a certain situation?
6. Are there aspects of life that people do not seem to understand as fully as they think they do?
7. Do I detect patterns in my experience that help me to understand who I am?
8. Are there patterns in other people's experiences that should help them to understand who they are?
9. Have I had recent experiences that have revealed to me with special clarity something about my character or about the world around me?

Neuleib/Fortune
Illinois State University

NEH COLLABORATIVE TEACHING PROJECT
SKILL EXERCISES FOR ESSAY FIVE
FALL, 1983

I. Paragraph Exercise.

A. Paragraph One

Grades may not measure the actual success or ability of students because many teachers use bad tests. A good test lets students express what they know. The questions on this type of test are "open." They give students the chance to explore what they know about the subject without having to worry that the teacher is looking for some small bit of information that only an expert would know. However, a bad test _____ _____.

For example, a typical bad test question would ask students to _____ _____.

This question does not allow students to express what they have learned because _____ _____.

B. Paragraph Two.

The harmful effects of spoiling young children and allowing them to always get their own way are bound to cause problems as they get older. _____ _____.

If they have lost respect for their parents' authority as young children, it's doubtful that this attitude will change when they are teenagers. _____ _____.

C. Paragraph Three.

Another example of children's materialism is their conversations about video games which I frequently heard. The children argued over who had the best video game computer. They showed that they valued one another according to _____ _____.

They argued over who had the most cartridges and the latest ones on the market. _____ _____.

II. Sentence-Combining/Logic Exercise.

A. Exercise One. Decide whether the sentences below could be combined. That is, make sure that the ideas do cohere.

1. I am strongly against supporting the social outcast of our society.
2. Many people would rather sit back and collect welfare than work for a living.
3. Millions of people waste and take advantage of the kindness of the government.
4. There are also people who deserve, need, and desperately depend upon help.
5. To deserving people I can find every much room in my heart to help in

their time of need. I have given to charity and hope it will really help someone in need.

B. How many of the sentences below could be combined, and how should it be done?
1. An Illinois resident can begin driving at the age of sixteen.
2. However, certain requirements must be met.
3. In order to drive at sixteen a resident must pass an approved driver's education course.
4. Then the resident must pass the required driving test and obtain an Illinois State driver's license.
5. Thus driving age contributes to some of the problems society faces today.
6. Many high school age drivers abuse the privilege of driving.
7. They drive recklessly and often are under the influence of alcohol.
8. This type of driving is often responsible for many needless deaths.
9. The abuses of high school drivers must be discussed and brought to the attention of society.
10. Finally, a way to stop these abuses must be found.

III. Sentence Editing Exercise. Re-write the following sentences to improve them stylistically and grammatically.
1. When in reality, the children love to participate for exercise and the chance to play for fun.
2. Good job opportunities are slim now and when some do appear, like Pepsico, the companies do not want to hire union workers for such reasons as slightly higher pay rates, and benefits.
3. As Robert Graham, who discusses education and economics in his article in the Journal of Educational Finance, argued that to compete successfully in today's world requires their ability to rapid change.
4. On the other hand, consuming large quantities of refined sugar can be hazerdous to our health. Although eating a small amount daily helps boost one's energy.
5. Until one morning when I woke up and realized I dreamed I had died did this idea come to the surface.
6. After receiving these treatments the doctor may want to surgically remove the tissue surrounding the area of cancer, which my father did go through.
7. To those brave daring souls who wish to own a motorcycle, I'm not going to try and talk you out of it, I just want to let you in on the amount of responsibility and the time you are going to have to create for the proper maintenance and periodic checks you must make to have a safe and reliable mode of transportation.
8. Some of the major producing companies of cocoa are Ivory Coast, the world's leading producer of cocoa.
9. The recommended weight loss per week is one to two pounds which can be easily attained without miracle diets or wiring your mouth shut and can definitely be more easily maintained.
10. Age makes no difference, no one is too old to learn how to ski if they are willing.

Fortune/Neuleib
Illinois State University

Sample of One Student's Writing
Process for an Academic Paper Assignment

Assignment 1: List of Courses for the Semester and Identify Problem
Math 201--addition/subtraction concept
Middle East and Africa--Muhammad/Ottoman Empire
American Gov't and Politics--wealthy vs. poor, why Americans distrust govt.
Personality--classical conditioning, behavior therapy, taken economy
English 101--sentence structure, proper placement of apostrophes
First Aid--transporting a victim to safety
Prewriting

A problem such as 45 + 27 may appear simple now but think back to when you were in first grade. Remember the difficulty you faced in dealing with the problem. More and more people are realizing the complexity of simple mathematical skills daily. Before this child is able to complete the problem, he must be taught and drilled on a number of steps and concepts. Each of these steps/concepts must be taught individually and reviewed until the child is comfortable with it.

The first step is teaching the 100 basic facts. These are taught individually in a specific sequence. The first group is known as the count on's. These numbers include the +1, +2, and +3's. Activities can be used to help the child better understand the concept. Numbers equal to 10 are the next ones learned. A ten frame is used to illustrate the idea. Doubles are taught next using live examples. The 9's are taught soon after using little patterns like 10-1. Finally, each of the remaining facts are taught individually.

Once the numbers are taught, the concept must definitely be understood. Given a number, the child must be able to say it as well as show it using counters.

The next step is to illustrate numbers using materials. Single digits are presented first and then 2 digits are introduced. The purpose of this exercise is to show a simple number in a variety of ways. An example would be showing 34 as 3 tens and 4 ones or 2 tens and 14 ones. This idea will enable the child to trade and borrow in later math concepts.

Simple addition facts are reviewed as one number plus another number. Two numbers plus one number is introduced next. Finally two numbers plus two numbers are introduced. The two numbers plus one number must be without trading. Then trading is introduced with these numbers.

The child must practice trading until they are comfortable with the ideas. Each of these ideas must be presented with a lot of verbal prompting, materials and games. A child isn't always going to remain attentive. Games to hold interest must be constantly used.

Day in and day out these problems in math are confronted by children. A great deal of teaching must be used to develop the child's knowledge of the procedures. Remember the difficulty a child goes through in math problems the next time a child has problems.

Notes: Concept of what a number is--visualize it.
Numeration--rewrite in another manner, basic + skills language of combining, carrying more complex addition skills, 1-2 digit division.

First draft

Think back to first grade. Everything was new to you. For the first time, classes were taken and one of them was math. Nowadays, that class would require very little effort on your part yet back then, a problem such as 45 + 27 could be anxiety arising. A great many of mathematical factors of learning contributed to yoour completion of the problem. The complexity of the concepts of learning a simple arithmetic problem is mind-boggling. Individual steps and concepts must be taught and drilled separately until each one idea is known completely. Simple addition facts, although basic to most

individuals, are extremely trying to young children. Through effective teaching combined with a child's genuine effort, the learning will occur and the child will be able to complete the problem. Although these simple facts are seen as easy to solve more and more individuals are beginning to realize one fact requires a number of steps to learn and understand before completing the problem. Thus, the completion of an addition fact is a complex process.

The first step in the idea of any mathematical problem is the concept of what a number is. In other words, a child must be able to visualize a specific number and understand its size in relationship to other numbers. The numbers are presented individually and drilled repeatedly. Concrete materials such as M+M's, cookies or poker chips are used to aid in the visualization of the numbers 0-10. Once the child has grasped the concept of what these numbers are, he moves on to the next concept.

The next idea learned in place value is the ones and tens places. Games using bundle sticks are played. For every ten single sticks, each representing a one, a trade for a bundle of 10 sticks is made. Each of these bundles represents a ten. A child is taught the numbers 20-99 and then 11-19 in this manner. Verbal cues such as 3 tens and 2 ones so thirty two is used.

Basic addition skills are introduced as the next step. These follow a pattern that helps the child remember groups of numbers. The first numbers learned are count-ons. Count-ones are +1, +2, and +3 numbers. Rhythm in ones voice emphasizes this addition. An example would be adding 2 to the number five. The child would say five, six, seven. The five and six would be spoken quite slowly. Once these numbers were learned, clauses are introduced. Concrete objects are used to emphasize the idea of doubles. Take 4 + 4 as an example. A black rubber spider with 4 legs on each side would illustrate the equation and aid in the child's memory of the double 4's. The 0 fact follows soon after. Games are played with poker chips. Either all or none of the poker chips are taken from the child's hand thus pointing out that adding 0 makes the number stay the same. Numbers equalling 10 are introduced next. A box with 10 squares is used. A certain number of these squares are covered with poker chips. The uncovered squares represent the number needed to make the 1st number equal to 10. 9's are introduced last. A child is instructed to find a pattern such as any number plus 9 will equal whatever teen number that has its one's place 1 less han the number added to 9. Once these numbers are learned, a new concept is introduced.

Numeration is presented as the next step in the complex process of addition. Numeration would allow a child to write a number such as 54 as 5 tens and 4 ones or 4 tens and 14 ones. The entire process includes concrete materials to enable the child to see how these 2 numbers are equal. The purpose of numeration as a step is that it will prepare the child for carrying or borrowing in later mathematical problems.

The final step in the process would be to learn to carry. From the child's previous experience with place value he knows that 10 ones equals one ten. First have the child add 2 single digit numbers that will end in a 2 digit number. Then have him repeat similar numbers until he understads what he's doing. He must be repeatedly drilled on for every 10 ones, a trade for a 10 can be made. Finally follow the same procedure for a 2 digit plus a one-digit and a 2 digit plus a two digit.

Day in, day out similar problems are confronted by children in a math class. A child must learn so many tiny skills in order to complete a single problem. Through materials and prompting, he may better comprehend his actions, thus producing an understanding of arithmetic.

Plan for Second Draft

On my second draft I want to clarify my introduction. I repeat myself too much and I want to simplify it.

For each paragraph I would like to present activities that help the child better learn the concepts he needs to know to complete the problem. I'd like to further explain teaching the numbers 20-99 and 11-19. Verbal language is important.

Second Draft

Think back to first grade when math was a new idea to you. Numbers were meaningless at first but you slowly acquired the knowledge and started successfully completing the problems. Whether you were aware of it or not, a great deal of concepts were introduced and taught to you in order for you to complete a simple problem. Nowadays it is no different. Addition involves complex steps in learning. Children are faced with understanding these concepts just as others did before. Each of these steps is introduced separately and drilled until mastery. Thus, it is a known fact that completion of an addition fact is a complex process.

Before an addition fact can be even considered, the concept of what a number is must be understood. This stage in mathematics is known as primary number work. A child within this stage learns the name, numeral itself, and the idea of what a number represents. Visual aids/concrete materials are beneficial in this number work. A child learns through repetition that one poker chip (material) represents the number 1 and can be verbalized as one. The first four numbers in mathematics are taught through the child's ability to recognize groups of objects representing a certain number. An example of the "sight group" can be illustrated using a flashcard with 3 buttons on it. The child sees these buttons and automatically knows they represent 3. Games focusing on verbalizing the number of objects on cards or on tables will reinforce the child's learning of the first four numbers since repetition is the key to learning. Numbers 5-10 are taught one after the other simply as one more than the last number earned. A child would know his numbers to four. He would be told to add one more to his pile fo 4 and be told it was five. Repetition of activities showing 5's along with 0 through 4 will secure the child's understanding of the numberal 5. The same activities and ideas are used to teach other numbers to 10. Once the child as grasped the concept of these numbers and can visualize them from materials, he moves on to the next step.

Place value of tens and ones is the next concept a child must learn. This idea simply means knowing that for every 10 ones, a number representing a 10 will be used. The child is taught this concept using wooden tongue depressors. Each depressor or stick represents a one. 10 of these sticks bundled togeher represent a 10. The child will begin counting how many large bundles there are and then adding the single sticks to it. Thus, he has represented a number. The numbers 20-99 are taught in this manner. The language used is a number of ten bundle sticks such as 3 and add the term "ity" onto it plus the ones thus 3 bundles of 10 and 4 sticks each equating one will be 34 and verbalized as 34. The numbers 11-19 are taught last using the same activity. These are taught as the final group of numbers since hey are known as backwards numbers due to the one's place is pronounced first wih pronunciation the teen following it. Thus 18 is pronounced eighteen.

Addition of the basic facts are the next step in the sequence of mathematical learning. The order in which the child learns helps him to remember the numbers longer. Count-on's are introduced first. These numbers are plus 1, 2 and 3. Rhythm of the voice is the best way to teach these numbers since the child retains these patterns of rhyme long enough for him to memorize the fact. An example of this rhyming can be illustrated when adding 2 to the number 5. The child would say 5, 6, 7 with the five and six spoken quickly and the 7 spoken slowly. Doubles are introduced next. Concrete realistic objects are used to emphasize this repetition of acitivites showing 5's along with 0 through 4 will secure the child's understanding of the numeral 5. The same activities and ideas are used to teach other numbers to 10. Once the child has grasped the concept of these numbers and can visualize them from materials, he moves on to the next step.

Place value of tens and ones is the next concept a child must learn. This idea simply means knowing that for every 10 ones, a number representing a 10 will be used. The child is taught this concept using wooden tongue depressors. Each depressor or stick represents a one. 10 of these sticks bundled together represent a 10. The child will begin counting how many large bundles there are and then adding the single sticks to it. Thus, he has represented a number. The numbers 20-99 are taught in this

manner. The language used a number of ten bundle sticks such as 3 and add the term "-irty" onto it plus the ones thus 3 bundles of 10 and 4 sticks each equating one will be 34 and verbalized as 34. The numbers 11-19 are taught last using the same activity. These are taught as the final group of numbers since they are known as backwards numbers due to pronunciation. The one's place is pronounced first with the teen following it. Thus 18 is pronounced eighteen.

Addition of the basic facts is the next step in the sequence of mathematical learning. The order in which the child learns helps him to remember the numbers longer. Count-on's are introduced first. These numbers are plus 1, 2, and 3. Rhythm of the voice is the best way to teach these numbers since the child retains these patterns of rhyme long enough for him to memorize the fact. An example of this rhyming can be illustrated when adding 2 on the number 5. The child would say 5, 6, 7 wih the five & 6 spoken quickly and the 7 spoken slowly. Doubles are introduced next. Concrete realistic objects are used to emphasize this idea. Take 4 + 4 as an example. A black plastic spider wih 4 legs on each side would illustrate the equation and commit to the child's memory the double facts. A different picture is used for each number. These are extremely helpful since the child is able to actually feel each of the objects in order to count them. The zero fact follows and is simply taught as adding none. Activities with poker chips emphasize this idea since a child can be given a number of chips and add 0 or none to them. Numbers equalling 10 are next introduced. A frame with 5 spaces on top and 5 spaces underneath is used. Poker chips are placed in a certain number of these spaces and the child counts the empty spaces. He does this until he has memorized the facts without needing the chips. Nines are the final numbers introduced. A child recognizes patterns, one of which is add 10 and subtract one. The child repeats all of these activities until he has successfully memorized the basic addition facts. Numeration is presented as the next step in the sequence. In this manner, numeration simply means naming a number in various ways through the use of bundle sticks. The process would enable a child to show 54 using 5 bundled sticks of 10 and 14 separate sticks or 4 bundled sticks of 10 and 14 separate sticks. The purpose of this idea is to prepare the child for later activities with tracking and carrying in mathematical problems.

The final step in this process would be that of carrying. From the child's previous experience with place value, he knows that 10 ones are equal to one ten. The child begins the carrying exercise using sticks and a 2 digit number such as 15 combined with a single digit number such 6. The child would show each of the numbers with sticks. He would then put both the groups together and then combine the single sticks and make a trade. In this situation, the child would have 1 group of ten and 5 ones combined with 6 ones. The child would combine 10 of the 11 ones and trade it in for a 10. The child repeats this activity regularly until he is comfortable trading numbers. After each problem is completed, he counts up the sticks and writes the answer. The child is now able to successfully complete addition facts using any amount of digits.

Children are faced with mathematical problems daily. Some are simple while others are complex. Whether the child is completing a simple or a complex network of concept learning before completing the problem.

Plan for final draft
Make verb tenses agree; correct spelling; make use of numerals consistent.

Final Draft: "Addition: Simple or Complex" by Beth Healy

Think back to first grade when math was new to you. Numbers were meaningless at first, but you slowly acquired the knowledge and started successfully completing the problems. Whether you were aware of it or not, a great many concepts were taught to you in order for you to complete a simple problem. Today, it is no different. Addition involves complex steps in learning, and a child is faced with understanding these concepts just as others before him were. Each of these steps is introduced

separately and drilled until mastery. Thus, solving an addition problem is a complex process.

Before an addition fact can be considered, the concept of what a number is must be understood. This stage in mathematics is known as primary number work. A child within this stage learns the name, the numeral itself, and the idea of what a number represents. Visual aids or concrete materials are beneficial in this number work. A child learns through repetition that one poker chip represents the number one and can be verbalized as one. The first four numbers in mathematics are taught through the child's ability to recognize groups of objects representing a certain number. An example of this "sight group" can be illustrated using a flashcard with three buttons on it. The child sees these buttons and automatically knows they represent three. Games focusing on verbalizing the number of objects on cards or on tables reinforce the child's learning of the first four numbers since repetition is the key to learning. Numbers five through ten are taught one after the other simply as one more than the last number learned. When a child knows his numbers one to four, he is told to add one more to his pile of four and that the number represents five. Repetition of activities showing fives along with one through four will secure the child's understanding of the number five. The same activities and ideas are used to teach other numbers to ten. Once the child has grasped the concept of these numbers and can visualize them using counters and his mind, he moves on to place value and numbers eleven to ninety-nine.

Place value of numbers is the next concept introduced. In this stage a child learns the position of a number either in the tens or the ones place. A child uses a two-squared box to help emphasize the difference in these two values. One of the squares, the one on the left, is the tens box, and the other, the one on the right, is the ones box. Given the number twenty-four, the child puts the two in the tens box and the four in the ones box. Then the child is taught through the use of materials such as bundled sticks that two tens represent two groups of ten sticks bundled together by a band. He is further taught that each groups of these bundled sticks is equivalent to ten single sticks. He is also taught that the four simple bundles represent four groups of one each. A child is then introduced to the numbers twenty through ninety-nine. He can then use the sticks to fully understand the value of these numbers. Eleven through nineteen are introduced last since they seem to be the most difficult for children to learn due to pronunciation. The ones place is verbalized first in the teen numbers, and this confuses a child since he or she is used to writing the first number heard. The box and the sticks are useful in teaching these numbers since they help a child viisualize the size of that number. Th place value concept is an easy one to learn and is highly effective in teaching the child numbers eleven through ninety-nine.

Addition of the basic facts is the next step in the sequence of mathematical learning. The order in which the child learns these facts helps him to remember the numbers longer. Count-ons are introduced first. These numbers include plus one, two, and three. Rhythm and rhyme of the voice are the best way to teach these numbers since the child retains these patterns of rhyme long enough for him to memorize the fact. An example of this rhyming can be illustrated when adding two to the number five. The child would say five, six, seven, with the five and six spoken quickly and the seven spoken slowly. Doubles are introduced next. Concrete realistic objects are used to emphasize this idea. For example, a black plastic spiker with four legs on each side ould illustrate the equation four plus four and commit to the child's memory the double facts. A different picture or object is used for each number. These are extremely helpful since the child is able to feel each of the objects in order to count them. The zero fact follows and is simply taught as adding none. Activities with poker chips help emphasize this idea since a child can be given a number of chips and told to add zero or nothing to these chips.

Numbers equaling ten are introduced as the next concept. A frame with five spaces on top and five spaces underneath is used to depict this fact visually. Poker chips are placed in a certain number of these spaces, and the child counts the empty spaces.

He does this until he has memorized the facts without needing further assistance in using the materials. Nines are the final numbers introduced. A child recognizes patterns for these numbers. One example of learning nines is making a ten and adding extras. To illustrate, take nine plus four as a problem. The child would take one from our and add it to the nine. Three would remain, and she would count on from ten until she reached three more or thirteen. The child repeats all of these activites until she has successully memorized and understands the basic addition facts.

Numeration is presented as the next step in the sequence. Numeration simply means naming a number in various ways through the use of bundle sticks. The process enables a child to show fifty-four using five bundles of ten and four single sticks or a four bundles of ten and fourteen single sticks. The purpose of this idea is to prepare the child for later activities with trading and carrying in mathematical problems.

The final step in this process involves carrying. From the child's previous experience with place value, he knows that ten ones are equal to one ten. The child begins the carrying exercise using sticks and a two digit number such as fifteen combined with a single digit number such as six. The child shows each of the numbers with sticks. He then puts both the groups together, and by combining the single sticks, he makes a trade for a bundled group of ten. In this situation, the child has one group of ten and five ones combined with six ones. The child is then holding one bundle of tne and eleven single sticks. He could proceed to exchange his ten single sticks for one bundled group. Thus he is left with two tens and one one. The child repeats this activity regularly until he is comfortable trading numbers. After each problem is completed, the child counts the number of sticks and writes the answer. In later lessons, he is instructed on how to avoid using the sticks and just using simple addition facts he knows to obtain the answer. The child is then able to complete addition facts successully using any amount of digits.

Children are faced with mathematical problems daily. Some are simple while others are complex. Whether the child is completing a simple or a complex problem, he will proceed through a vast network of concept learning before completing that problem. Who would have ever thought that math entailed so much knowledge?